

Notice of Allowability

Application No.

10/729,536

Examiner

Kuen S. Lu

Applicant(s)

NOMOTO ET AL.

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/12/2007.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>2/26/2007</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 12, 2007 has been entered.

2. This action is responsive to Applicant's Amendment filed February 12, 2007 and it is acknowledged claims 1-2 and 4-12 were amended.

3. After a thorough search and examination of the present application, and in light of the prior art made of record, Applicant's Amendment and Remarks filed February 12, 2007 and Examiner's amendments made February 26, 2007, Claims 1-12 are allowed.

Examiner's Amendments

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this Examiner's amendment, listed below, was given in telephone interview with inventor, Mr. Jeffrey S. King (Registration 58,791) on February 26, 2007 for amending claims 1, 5-6 and 10. The summary of interview conducted on February 26, 2007 is attached.

4.1. Please amend Claims 1, 5-6 and 10 as follow:

1. (Currently Amended) (currently amended) A data conversion method for converting table data of a database, the data conversion method ~~to be~~ executed on a data conversion system including:

a data conversion server having table volume mapping information, and a storage including at least one volume, said data conversion method comprising:

separating, by execution of a data conversion program stored upon a medium of the data conversion server, a data conversion job used for data conversion into a data conversion server job for executing conversion processing on the data conversion server and a storage job for instructing to make a copy of a table on a volume of the storage,

wherein the separating of the data conversion job into the data conversion server job and the storage job includes:

creating a parameter table of the data conversion server job by extracting and converting records from a parameter table of the data conversion job; and

creating a parameter table of the data storage job by extracting and

converting records from the parameter table of the data conversion job and the table volume mapping information;

executing, by a job execution engine of the data conversion server, the storage job to instruct the storage to copy the volume of the storage including the table based on the parameter table of the storage job and to store the copied volume on the storage; and

executing, by the job execution engine of the data conversion server, the data conversion server job to perform data conversion of the table included in the copied volume based on the parameter table of the data conversion server job.

5. (Currently Amended) A computer system comprising:

a database conversion server for converting a table of a database, having table volume mapping information; and

storage for storing the database in volumes;

wherein said database conversion server has table volume mapping information that associates the table of the database with volume in which the table is stored, said database conversion server being configured to:

separate a data conversion job used for data conversion into a data conversion server job for executing conversion ~~processing~~ program stored upon a medium on the database conversion server and a storage job for instructing to make a copy of the table on the storage,

wherein the separating of the data conversion job into the data conversion server job and the storage job includes:

creating a parameter table of the data conversion server job by extracting and converting records from a parameter table of the data conversion job; and

creating a parameter table of the data storage job by extracting and converting records from the parameter table of the data conversion job and the table volume mapping information;

execute, by a job execution engine of the data conversion server, the storage job to instruct the storage to copy the volume including the table based on the parameter table of the storage job and to store the copied volume on the storage; and

execute, by a job execution engine of the data conversion server, the data conversion server job to perform data conversion of the table included in the copied volume based on the parameter table of the data conversion server job.

6. (Currently Amended) A database conversion server for converting a table of a database, said database conversion server having table volume mapping information and being connected to storage for storing the database in volumes, said database conversion server comprising:

a module configured to separate a data conversion job definition used for data conversion into a data conversion server job definition for executing conversion processing program stored upon a medium on the database conversion server and a storage job definition for instructing to make a copy of the table on the storage,

wherein the module configured to separate the data conversion job definition into the data conversion server job definition and the storage job definition is further configured to:

create a parameter table of the data conversion server job definition by extracting and converting records from a parameter table of the data conversion job; and

create a parameter table of the ~~data~~ storage job definition by extracting and converting records from the parameter table of the data conversion job and the table volume mapping information;

a job execution engine configured, upon request, to execute the storage job definition, and thereby the storage is instructed to copy a volume of the storage to create a copied volume on the storage, wherein the copied volume ~~including~~ includes the table included in the parameter table of the storage job definition; and

the job execution engine configured, upon request, to execute the data conversion server job definition, and thereby only fields which need to be converted are extracted from the table included in the copied volume, and then the extracted fields are converted.

10. (Currently Amended) A data conversion program for converting table data of a database, said data conversion program comprising:

code for separating a data conversion job definition used for data conversion into a data conversion server job definition for executing a conversion processing program

stored upon a medium on a data conversion server having table volume mapping information and a storage job definition for instructing to make a copy of a table on a storage including at least one volume, wherein the code for separating of the data conversion job definition into the data conversion server job definition and the storage job definition includes:

code for creating a parameter table of the data conversion server job definition by extracting and converting records from a parameter table of the data conversion job definition; and

code for creating a parameter table of the data storage job definition by extracting and converting records from the parameter table of the data conversion job definition and the table volume mapping information;

code for requesting a job execution engine of the data conversion server to execute the storage job definition, and thereby the storage is instructed to copy a volume of the storage to create a copied volume on the storage, wherein the copied volume ~~including~~ includes the table included in the parameter table of the storage job definition; and

code for requesting the job execution engine of the data conversion server to execute the data conversion server job definition to perform data conversion of the table included in the copied volume, the data conversion based on the parameter table of the data conversion server job definition.

Reasons For Allowance

5. The following is an examiner's statement of reasons for allowance:

In the Examiner's Office Action for Final Rejection of September 15, 2006, 35 U.S.C. 35 U.S.C. § 103, rejections to claims 1-12 as being unpatentable was primarily based on Van Arsdale et al.: "SYSTEM FOR UPDATING A DATABASE", U.S. Patent Application Publication No. 2003/0135480, published 7/17/2003, hereinafter "Van Arsdale" and in view of Yoshikawa et al.: "SERVER DEVICE, COMMUNICATION TERMINAL, RELAY SERVER, AND RECODING MEDIUM STORING PROGRAM", U.S. Patent Application Publication No. 2003/0023758, published 1/30/2003, hereinafter "Yoshikawa".

In the Remarks filed on February 12, 2007, concerning the independent claims 1, 5-6 and 10, Applicant pointed out that Arsdale fails to teach at least "executing ... the storage job to instruct the storage to copy the volume of the storage including the table based on the parameter table of the storage job", while the combination of Van Arsdale and Yoshikawa fails to suggest or disclose a data conversion method for converting table of a database, the method including the steps of: executing, by a job execution engine of the data conversion server, the storage job to instruct the storage to copy the volume of the storage including the table based on the parameter table of the storage job; and executing, by the job execution engine of the data conversion server, the data conversion server job to perform data conversion of the table included in the copied volume based on the parameter table of the data conversion server job.

After further consideration of Applicant's amendment made to claims 1-2 and 4-12, and Examiner's amendment made to claims 1, 5-6 and 10, Examiner is persuaded that Applicant's Remarks as filed are valid with respect to the most recently amended claims 1, 5-6 and 10, and the combined subject matter as amended in the claims have overcome the teaching of the cited Van Arsdale and Yoshikawa references.

An updated search for the prior arts on EAST database and on domains (NPL-ACM, Google, NPL-IEEE) has been conducted. The prior arts searched and investigated in the database and domains does not fairly teach or suggest the teaching of the newly amended claimed subject matter as described above and reflected by the combined elements in each of the independent claims 1, 5-6 and 10.

The dependent claims in the groups (2-4), (7-9) and (11-12), depending directly or indirectly upon claims 1, 6 and 10, respectively, are also distinct from the prior art for the same reason.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Contact Information

7. Any inquiry concerning this communication or earlier communications from the


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examiner should be directed to Kuen S. Lu whose telephone number is (571) 272-4114. The examiner can normally be reached on Monday-Friday (8:00 am-5:00 pm). If attempts to reach the examiner by telephone pre unsuccessful, the examiner's Supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 703-305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Page 13 published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 703-305-3900 (toll free).

Kuen S. Lu, 
Patent Examiner, Art Unit 2167

March 1, 2007


JOHN COTTINGHAM
SUPERVISORY PATENT EXAMINER
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